Title 154 - STATE FIRE MARSHAL Chapter 4 - USE OF EXPLOSIVES

001. Use: General.

<u>001.01</u>. The handling of explosives shall be performed only by a person holding a valid and subsisting permit from State Fire Marshal to use explosives.

001.02. It is the responsibility of the owner of explosives or the person in possession of a storage permit or a business enterprise permit or a user's permit to control the explosives and the use thereof. The owner of explosives or the one storing explosives under the authority of a storage permit or a person holding a user's permit or a business enterprise purchase permit must control his or her explosives by keeping an accurate and continuing inventory of all explosives in the manner provided for each type of permit holder or owner and set out hereafter. It is the responsibility of all owners of explosives or employers of agents, employees, or subcontractors using explosives, or all storers of explosives, to employ people only of good judgement, that know how to handle explosives safely. It is the responsibility of the person in the immediate control of explosives or the owner or user of explosives in simmediate control of explosives to take such steps as necessary to insure that such explosives are not finding their way into the hands of unauthorized persons.

<u>001.03</u>. While explosives are being handled or used, smoking shall not be permitted and no one near the explosives shall possess matches, open lights or other fire or flame. No person shall handle explosives while under the influence of intoxicating liquors, narcotics, or marijuana.

 $\underline{001.04}$. Original containers or type 2 or type 3 magazines shall be used for taking detonators and

other explosives from storage magazines to the blasting area. Any wood, paper, or other materials employed in packing explosives shall not be burned in a stove, fireplace, or other confined space, or be used for any purpose. Such materials shall be destroyed by burning at an isolated location out of doors, and no person shall be nearer than 100 feet after burning has started.

<u>001.05</u>. Only electric blasting caps, short period delay electric blasting caps, or detonating fuse shall be used to initiate blasts in congested districts, on highways, or adjacent to highways open to traffic. In no such instance shall initiation by cap and fuse be permitted.

<u>001.06</u>. When blasting is done in congested areas or in close proximity to a structure, railway, or highway or any other installation that may be damaged, the blast shall be covered before firing with a mat so constructed that it is capable of preventing fragments from being thrown. When such blasting is being carried out near a highway, the operator may, in lieu of using a mat, and with the permission of local authorities, block the roads adjacent to the firing area while such firing is in progress.

001.07. The person in control of a blasting operation in an area where the blasting presents even a remote possibility of damage to private or public property, must keep an accurate blasting log for each blast. The blasting log shall record the job location, date, time of blast, weather conditions, type of blast, type of materials blasted, type and size cartridge of explosives used, number of diameter of holes, hole depth, and total quantity of explosives fired instantaneously or by a delay interval. It shall be the person or business in control of the blasting operation to determine the possibility of whether or not such damage exists.

<u>001.08</u>. Persons authorized to prepare explosives charges or conduct blasting operations shall use every reasonable precaution, including but not limited to warning signals, flags, barricades, or woven wire mats to insure the safety of the general public and workmen.

Title 154 - State Fire Marshal Chapter 4

- <u>001.09</u>. Blasting operations, except by special permission of the Office of the State Fire Marshal, shall be conducted only during the daylight hours
- <u>001.10</u>. Whenever blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, telegraph and steam utilities, the owner, "User", or employer shall notify the appropriate representatives of such utilities, at least 24 hours in advance of blasting, specifying the locations and intended time of such blasting. Verbal notice shall be confirmed with written notice. In an emergency, this time limit may be waived by the State Fire Marshal or his or her staff.
- <u>001.11</u>. Due precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent power lines, dust storms, or other sources of extraneous electricity. These precautions shall include:
 - <u>ool.11A</u>. The suspension of all blasting operations and removal of persons from the blasting area during the approach and progress of an electrical storm.
 - 001.11B. The posting of signs warning against the use of mobile radio transmitters on all roads within 350 feet of the blasting operations. Publicly owned electrical distribution, public utilities, and privately owned electric distribution public utilities and the communications systems are excepted.
 - 001.11C. User, owner, or employer shall follow all regulations pertaining to blasting in the vicinity of radio transmitters or power lines.
- 001.12. Explosives or blasting equipment that are obviously deteriorated or damaged shall not be used.
- <u>001.13</u>. No explosives shall be abandoned.
- <u>001.14</u>. Any applicant for a user's permit shall demonstrate knowledge regarding use of class, type and quantity of explosive materials for various purposes and circumstances. This demonstration shall be made by:

Title 154 - State Fire Marshal Chapter 4

<u>001.14A</u>. Sufficiently passing a written examination conducted by the State Fire Marshal in his or her office or place designated by the State Fire Marshal.

O01.14B. Satisfactorily proving to the State Fire Marshal that the applicant is certified in the usage of explosives by a reputable certifying agent with expertise in explosives use. Or by proving to the State Fire Marshal that the applicant has the equivalent of such certification through experience, education or other equivalency standard. Proof shall be made by credible documentation or explanation attached to the application and attested to by the applicant.

002. Use: Loading of Explosives in Blast Holes.

<u>002.01</u>. All drill holes shall be sufficiently large to admit freely the insertion of the cartridges of explosives.

<u>002.02</u>. Tamping shall be done only with wood rods without exposed metal parts. Nonsparking metal connectors may be used for jointed poles. Plastic tamping poles may be used provided they have been approved by the State Fire Marshal. Violent tamping shall be avoided.

002.03. No holes shall be loaded except those to be fired in the next round of blasting. Seismographic operations shall follow this procedure wherever possible for maximum safety, but where practicality will not permit, they are excepted from the provisions of this sub-section.

002.04. Drilling shall not be started until all remaining butts of old holes are examined with a wooden stick for unexploded charges, and if any are found they shall be refired or washed out by or under the direction of a competent and experienced person before work proceeds.

002.05. No person shall be allowed to deepen drill holes which have contained explosives.

<u>002.06</u>. After loading for a blast is completed, all excess blasting caps or electric blasting caps and other explosives shall immediately be returned to their separate storage magazines.

003. Use: Initiation of Explosive Charges

- <u>003.01</u>. When fuse is used, the blasting cap shall be securely attached to the safety fuse, with a standard ring-type cap crimper. All primers shall be assembled at least 50 feet from any magazine.
- 003.02. Primers shall be made up only as required for each round of blasting.
- <u>003.03</u>. No blasting cap shall be inserted in the explosives without first making a hole in the cartridge for the cap with a wooden punch of proper size or with a standard cap crimper.
- 003.04. Explosives shall not be extracted from a hole that has once been charged or has misfired unless it is impossible to detonate the unexploded charge by the insertion of a fresh additional primer. This work shall be done by or under the supervision of a competent and experienced person.
- 003.05. If there are any misfires while using the cap and fuse, all persons shall remain away from the charge for a least 1 hour. If electric blasting caps are used and a misfire occurs, this waiting period may be reduced to 30 minutes. Misfires shall be handled under the direction of the person in charge of the blasting and all wires shall be carefully traced and a search made for unexploded charges. Seismographic operations will comply with the requirements of the paragraph wherever possible where practicality permits but are otherwise excepted from the provisions of the sub-section.
- $\frac{003.06}{\text{holes}}$. Blasters, when testing circuits to charged holes, shall use only blasting galvanometers designed for this purpose.
- <u>003.07</u>. Only the person making leading wire connections in electrical firing shall fire the shot. All connections shall be made from bore hole back to the source of firing current, and the leading wires shall remain shorted and not be connected to the blasting machine or other source of current until the charge is to be fired.

Approved blasting machines should be used as a source of electric current for initiating electrically fired charges of explosives.

Title 154 - State Fire Marshal Chapter 4

003.08. Before a blast is fired, a loud warning signal shall be given by the person in charge who has made certain that all surplus explosives are in a safe place, all persons and vehicles are at a safe distance or under sufficient cover, and that an adequate warning has been given.

<u>004</u>. All investigative reports must be filed. Any person investigating the theft, illegal use, and/or possession of explosives, must immediately file a report to that effect with the State Fire Marshal, Lincoln, Nebraska, and local police, sheriff, or State Patrol.

OO5. Conflicts. Nothing contained in these Rules and Regulations shall be in conflict with provisions of the National Security Act of 1947, as amended, or the Espionage and Sabotage Act of 1954 as amended.

Statutory Authority: Neb. Rev. Stat. §§28-1213 to 28-1239; 81-502

Legal Citation: Title 154, Ch. 4, Nebraska State Fire Marshal